

AMENDMENT TO THE CLAIMS

In the Claims:

Please amend the instant claims 1, 2, 4, 5, 8, 9, 11, 12, 14, 15, and 16 including the cancellation of claims 7 and 7 to 57, as follows:

1. (currently amended) A chip resistant coating on high tensile steel ~~produced from~~~~comprising the fused and cured product of~~ a coating powder composition comprising

100 weight parts of a resin chosen from:

a resin comprising A) an epoxy resin plus B) a polyhydroxyl functional cross-linker having a hydroxy equivalent weight of from 200 to 500, and

a resin comprising an adduct of between about from 75 and about to 95 wt%, based on the total weight of A) plus B), of an epoxy resin component A) plus B), and between about from 5 and about to 25 wt%, based on the total weight of A) plus B), of an elastomer component B) having a glass-transition temperature of -30°C or below, and

at least ~~about~~ 75 weight parts of zinc powder.

2. (currently amended) The coating according to Claim 1 wherein said epoxy ~~resin~~~~component~~ is a bisphenol A epoxy resin.

3. (original) The coating according to Claim 1 wherein said elastomer component is carboxyl terminated butadiene/acrylonitrile rubber.

4. (currently amended) The coating of Claim 1 wherein said composition contains at least ~~about~~ 150 weight parts of zinc powder.

5. (currently amended) The coating of Claim 1 wherein said composition contains at least ~~about~~ 200 weight parts of zinc powder.

6. (original) The coating according to Claim 1 wherein said elastomer component has a glass transition temperature of -40°C or below.

7. (canceled)

8. (currently amended) A chip resistant dual coating ~~on~~for high tensile steel comprising a first coat in contact with said high tensile steel and a second outer coat,

said first coat ~~produced from~~comprising the fused and cured product of a coating powder composition comprising

100 weight parts of a resin chosen from:

a resin comprising A) an epoxy resin plus B) a polyhydroxyl functional cross-linker having a hydroxy equivalent weight of from 200 to 500, and

a resin comprising an adduct of between about from 75 and about to 95 wt%, based on the total weight of A) plus B), of an epoxy resin component A) plus B), and between about from 5 and about to 25 wt%, based on total weight of A) plus B), of an elastomer B) component having a glass transition temperature of -30°C or below, and

at least ~~about~~ 75 weight parts of zinc powder,

said second coat ~~produced from~~comprising the fused and cured product of a coating powder composition comprising

100 weight parts of a resin chosen from:

a resin comprising A) an epoxy resin plus B) a polyhydroxyl functional cross-linker having a hydroxy equivalent weight of from 200 to 500, and

a resin comprising an adduct of between about from 75 and about to 95 wt%, based on total weight of A) plus B), of an epoxy resin component A) plus B), and between about from 5 and about to 25 wt%, based on total

weight of A) plus B), of an elastomer component having a glass transition temperature of -30°C or below, said second coating being zinc-free.

9. (currently amended) The coating powder according to Claim 8 wherein said epoxy ~~resin~~component of said first coat and of said second coat is a bisphenol A epoxy resin.

10. (original) The coating according to Claim 8 wherein said elastomer component of said first coat and of said second coat is carboxyl terminated butadiene/acrylonitrile rubber.

11. (currently amended) The coating of Claim 8 wherein the coating composition of said first coat contains at least ~~about~~ 150 weight parts of zinc powder.

12. (currently amended) The coating of Claim 8 wherein the coating composition of said first coat contains at least ~~about~~ 200 weight parts of zinc powder.

13. (original) The coating according to Claim 8 wherein said elastomer component of said first coat and of said second coat has a glass transition temperature of -40°C or below.

14. (currently amended) The coating according to Claim 8 wherein said first coat is between about 1.5 and about 3 mils thick and said second coat is ~~between about~~from 10 ~~and about~~ to 15 mils thick.

15. (currently amended) The coating according to Claim 8 wherein said second coat is porous so as to have a density reduced at least ~~about~~ 25-40 % relative to theoretical density.

16. (currently amended) The coating according to Claim 8 wherein said second coat composition contains ~~between about~~from 20 and ~~about~~to 80 parts per hundred resin (phr)~~phr~~ fibers.

17. (canceled)

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- 57. (canceled)

Please add the following new claims 58-62.

58. (new) A method for coating a high-tensile steel surface to provide a chip resistant coating according to Claim 1 comprising
applying said coating composition to said surface, and
heating said coating composition to form a coating.

59. (new) A method for providing a chip resistant coating on high tensile steel according to claim 8 comprising
applying said first coating powder composition to said surface,
applying said second coating powder composition to said first coating composition, and
heating said first and second coating compositions to form a dual coating,

wherein said heating optionally includes heating prior to applying said second coating composition to cure said first coating composition to form said first coat of said dual coating.

60. (new) A method for coating a high-tensile steel surface to provide a chip resistant coating according to Claim 4 comprising

applying said coating composition to said surface, and
heating said coating composition to form a coating.

61. (new) A method for providing a chip resistant coating on high tensile steel according to claim 11 comprising

applying said first coating powder composition to said surface,
applying said second coating powder composition to said first coating composition, and
heating said first and second coating compositions to form a dual coating,

wherein said heating optionally includes heating prior to applying said second coating composition to cure said first coating composition to form said first coat of said dual coating.

62. (new) A method for providing a chip resistant coating on high tensile steel according to claim 14 comprising

applying said first coating powder composition to said surface,
applying said second coating powder composition to said first coating composition, and

heating said first and second coating compositions to form a dual coating,

wherein said heating optionally includes heating prior to applying said second coating composition to cure said first coating composition to form said first coat of said dual coating.

SUPPORT FOR THE AMENDMENTS TO THE CLAIMS

The amendments to claims 1 and 8 serve to better define the instant invention as a "chip resistant" coating. Support for this amendment may be found in the instant specification, for example, at page 2, lines 22 through 23.

The amendments to claims 1 and 8 further add the article "the", any necessary commas, ",", and the conjunctive "and" as necessary to make the claims read in idiomatic English.

The amendments to claims 1 and 8 still further recite that the coatings are "produced from" a powder coating composition, thereby better defining the instant invention because the coatings are produced by heating or flowing a powder composition regardless of how the powder coating compositions respond to heating or flowing, i.e. curing, fusing and curing or coalescing to form a film. Support for this amendment may be found, for example, in the instant specification at page 2, line 22 to page 3, line 23, page 4, lines 8-10 and page 5, lines 5-13.

The amendments to claim 1 yet still further incorporate the limitations of original claim 31 therein and the amendments to claim 8 yet still further incorporate the limitations of original claim 36 therein. These amendments seek to properly define the instant invention as reciting two species of toughened epoxy resins in the same claim. Support for this amendment may be found, for example, in the instant specification at page 2, line 22 to page 3, line 23.

The amendments to claims 1, 4 and 5, at the last line, at Claim 8, at line 14, and at claims 11 and 12, second to last line add the phrase "weight" before the phrase "parts" (both instances) and seek solely to recite a more definite proportion of zinc. Likewise, claims 1 and 8 are amended in seeking solely to recite clearer proportions of resins as "weight" parts. Support for this amendment may be found, for example, in the instant specification at page 2, lines 1 to 7 and at page 3, line 24 to page 4, line 1.

The amendments to claims 1, 2 and 8 seek solely to insure consistency in antecedent basis regarding the term "resin".

The amendments to each of claims 1, 8 and 14 regarding "from", "to" and "between", seeks solely to clarify that the recited ranges hydroxyl equivalent

weights, epoxy resin parts, elastomer resin parts and zinc parts include the endpoints of those ranges. Further, these amendments seek to clarify the claims by deleting the phrase "about" from them. Still further, these amendments seek to clarify that the elastomer coating comprises an "adduct" of the elastomer component and epoxy resin. Support for this amendment may be found, for example, in the instant specification at page 3, lines 1 to 4 and 18-20, page 4, lines 12-17 and page 6, line 25 to page 7, line 2.

The amendments at the end of claims 4 and 11 seek solely to add a period, ".", to the end of those claims.

The amendment to claim 15 merely seeks to recite a coating made from the instant composition and having a 40 % reduction in density relative to the theoretical density of the same coating. Support for this amendment may be found in the instant specification, for example, at page 4, lines 24-27.

The amendment to claim 16 seeks solely clarify that claim by spelling out the meaning of the acronym "phr". Support for this amendment may be found in the instant specification at, for example, page 3, line 24 to page 4, line 1 and at page 4, lines 20-24.

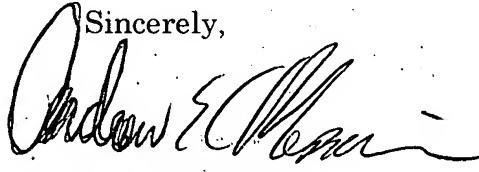
Support for new claims 58 to 62 can be found in the instant specification at, for example, at page 4, lines 8-17, and at page 5, lines 5-13.

CONCLUSION

It is submitted that the instant claims are in condition for allowance. An early and favorable action on the merits is earnestly solicited. If the Examiner has any questions, he or she is urged to contact the undersigned at the number given below

Please charge any additional fees to deposit account no. 18-1850.

Sincerely,

A handwritten signature in black ink, appearing to read "Andrew E.C. Merriam". The signature is fluid and cursive, with a large initial "A" and a long, sweeping underline.

Andrew E.C. Merriam

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